

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for processing messages in a mobile communications network, the method comprising:  
at a porting control routing (PCR) node capable of routing signaling messages between nodes in a mobile communications network:
  - (a) ~~receiving, at a first network node,~~ a first message relating to a communication in a mobile communications network, the first message including a called party identifier, the first message being destined for a mobile services node in the mobile communications network;
  - (b) analyzing information in the first message to determine whether mobile number portability processing is required for the first message;
  - (c) in response to determining that mobile number portability processing is required for the first message, performing a lookup in a first database located in the PCR node based on the called party identifier to determine whether the called party has been ported out of ~~an area~~ a network serviced by the ~~mobile-services~~ PCR node;
  - (d) in response to determining that the called party has been ported out of the ~~[[area]]~~ network serviced by the ~~mobile-services~~ PCR node, analyzing information in the first message to determine whether a reply is required for the first message; ~~[[and]]~~

- (e) in response to determining that a reply is required for the first message, formulating and sending the reply on behalf of the mobile services node based on information extracted from the first database; and
  - (f) in response to determining that the called party has not been ported out of the network serviced by the PCR node, obtaining routing information for the message and routing the message using the routing information.
- 2. (Original) The method of claim 1 wherein receiving a first message includes receiving a signaling system 7 (SS7) signaling message.
- 3. (Original) The method of claim 2 wherein receiving an SS7 signaling message includes receiving an Internet protocol-encapsulated SS7 signaling message.
- 4. (Original) The method of claim 1 wherein receiving a first message includes receiving a send routing information (SRI) signaling message.
- 5. (Original) The method of claim 1 wherein receiving a first message includes receiving a session initiation protocol (SIP) signaling message.
- 6. (Currently Amended) The method of claim 4 wherein ~~generating a~~ formulating the reply message includes generating a SRI acknowledge (SRI Ack) signaling message.

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7. (Original) The method of claim 1 wherein receiving a first message includes receiving a short message service (SMS) signaling message.
8. (Original) The method of claim 1 wherein the called party identifier includes a mobile subscriber ISDN (MSISDN) number.
9. (Original) The method of claim 1 wherein the called party identifier includes a telephone number associated with a wireline network subscriber.
10. (Original) The method of claim 1 wherein the called party identifier includes an electronic mail (email) address.
11. (Original) The method of claim 1 wherein the called party identifier includes an Internet protocol (IP) address.
12. (Original) The method of claim 1 wherein analyzing information in the first message to determine whether number portability processing is required includes examining a translation type (TT) parameter.
13. (Original) The method of claim 1 wherein analyzing information in the first message to determine whether number portability processing is required includes examining a global title indicator (GTI) parameter.

14. (Original) The method of claim 1 wherein analyzing information in the first message to determine whether number portability processing is required includes examining a numbering plan (NP) parameter.
15. (Original) The method of claim 1 wherein analyzing information in the first message to determine whether number portability processing is required includes examining a nature of address indicator (NAI) parameter.
16. (Original) The method of claim 1 wherein performing a lookup in the first database includes performing a lookup in the first database based on a mobile service entity type in the first message.
17. (Original) The method of claim 15 wherein the mobile service entity type indicates a home location register.
18. (Original) The method of claim 15 wherein the mobile service entity type indicates a short message service center (SMSC).
19. (Original) The method of claim 1 wherein analyzing information in the first message to determine whether a reply is required for the first message includes examining a transaction capabilities application part (TCAP) or mobile application part (MAP) operation code parameter in the first message.

20. (Original) The method of claim 1 wherein generating a reply message using information extracted from the first database includes using a routing number (RN) value obtained from the first database.
21. (Original) The method of claim 1 wherein performing a lookup in a first database includes performing a lookup in an exceptions-based routing database having entries that are exceptions to ranges of called party identifiers.
22. (Original) The method of claim 20 comprising in response to failing to locate an entry corresponding to the called party identifier in the first database, performing a second lookup in a second database based on the called party identifier, wherein performing a lookup in the second database includes performing a lookup in a range-based routing database having entries corresponding to the ranges of called party identifiers.
23. (Currently Amended) A porting control routing (PCR) node for processing messages in mobile communications network, the ~~routing~~ PCR node comprising:
  - (a) a communication module for receiving a first message destined for a mobile services node and relating to a [[call]] communication in a mobile communications network, the first message including a called party identifier;

- (b) a first database located in the PCR node containing entries corresponding to called party identifiers, the entries each including information as to whether mobile number portability processing is required for call signaling messages and information as to whether a reply is required for the call signaling messages and information as to whether the called party has been ported out of a network serviced by the PCR node; and
- (c) a database controller located in the PCR node for determining, based on the information in the first database, whether mobile number portability processing is required for the first message, and, in response to determining that mobile number portability processing is required for the first message:
  - (i) determining whether the called party has been ported out of the network serviced by the PCR node and determining whether a reply is required for the first message; [[and]]
  - (ii) in response to determining that the called party has been ported out of the network serviced by the PCR node and that a reply is required for the first message, formulating and sending the reply on behalf of the mobile services node; and
  - (iii) in response to determining that the called party has not been ported out of the network, obtaining routing information for the first message and routing the first message using the routing information.

24. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the communication module includes a signaling system 7 (SS7) message transfer part (MTP) capable link interface module (LIM).
25. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the communication module includes a transmission control protocol / Internet protocol (TCP/IP) – transport adapter layer interface (TALI) capable data communication module (DCM).
26. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the first database comprises an exception-based database and each entry in the exception-based database is an exception to a set of default routing rules.
27. (Currently Amended) The ~~routing~~ PCR node of claim 26 comprising a range-based database containing entries corresponding to ranges of called party identifiers wherein each entry in the exception-based database contains a called party identifier or range of called party identifiers that do not fall within any of the called party identifier ranges in the range-based database.
28. (Currently Amended) The ~~routing~~ PCR node of claim 27 wherein the database controller searches the exception-based database, and, in response to failing to

locate an entry in the exception-based database, searches the range-based database.

29. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the first message is a send routing information (SRI) message.
30. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the first message is a session initiation protocol (SIP) message.
31. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the first message is a short message service (SMS) message.
32. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the reply is an SRI acknowledge (SRI Ack) message.
33. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the database controller determines whether number portability processing is required by examining at least one of a translation type (TT), global title indicator (GTI), numbering plan (NP), and nature of address (NAI) parameters in the first message.



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34. (Currently Amended) The ~~routing~~ PCR node of claim 23 wherein the database controller generates the reply in response to determining that the first message requires a reply by the mobile services node.
35. (Canceled)